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APPLICATION NO.	ION NO. FILING DATE FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/755,068	01/08/2001	Jing Wu	169.1957	5114		
5514 75	5514 7590 06/22/2004			EXAMINER		
FITZPATRICK CELLA HARPER & SCINTO			LEE, Y YOUNG			
30 ROCKEFELLER PLAZA NEW YORK, NY 10112			ART UNIT	PAPER NUMBER		
			2613	10		
			DATE MAILED: 06/22/2004	10		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applica	ation No.	Applicant(s)				
Office Action Summary								
			,068	WU ET AL.				
			er	Art Unit				
		Y. Lee		2613				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
THE - Exte after - If the - If NO - Failu	ORTENED STATUTORY PERIOD F MAILING DATE OF THIS COMMUN Insigns of time may be available under the provisions SIX (6) MONTHS from the mailing date of this common period for reply specified above is less than thirty (3) period for reply is specified above, the maximum state to reply within the set or extended period for reply reply received by the Office later than three months are departed term adjustment. See 37 CFR 1.704(b).	ICATION. of 37 CFR 1.136(a). In no nunication. 60) days, a reply within the satutory period will apply and will, by statute, cause the a	event, however, may a reply be statutory minimum of thirty (30) of will expire SIX (6) MONTHS from the polication to become ABANDO	timely filed fays will be considered timely. om the mailing date of this commun NED (35 U.S.C. § 133).	nication.			
Status								
1)⊠	Responsive to communication(s) file	ed on <i>21 May 2004</i>						
2a)□	This action is FINAL . 2b) This action is non-final.							
, —		, —		prosecution as to the mer	rits is			
,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
5)□ 6)⊠ 7)□	 Claim(s) 1-21 is/are pending in the application. 4a) Of the above claim(s) 8-13,15,16,18 and 19 is/are withdrawn from consideration. □ Claim(s) is/are allowed. ☑ Claim(s) 1-7,14,17,20 and 21 is/are rejected. □ Claim(s) is/are objected to. □ Claim(s) are subject to restriction and/or election requirement. 							
Applicat	ion Papers							
9)⊠	The specification is objected to by th	e Examiner.						
10)	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)	The oath or declaration is objected to	b by the Examiner.	Note the attached Office	be Action or form PTO-15	52.			
Priority (under 35 U.S.C. § 119							
a)	Acknowledgment is made of a claim All b) Some * c) None of: 1. Certified copies of the priority 2. Certified copies of the priority 3. Copies of the certified copies application from the Internation see the attached detailed Office actions.	documents have be documents have be of the priority documental Bureau (PCT R	een received. een received in Applica nents have been recei ule 17.2(a)).	ation No ved in this National Stag	e			
Attachmen	ıt(s)							
1) Notic	ce of References Cited (PTO-892)		4) Interview Summa	ry (PTO-413)				
3) 🛛 Infor	ce of Draftsperson's Patent Drawing Review (Finalis) (PTO-1449 or No(s)/Mail Date 3,6,7.		Paper No(s)/Mail 5) Notice of Informa 6) Other:	Date I Patent Application (PTO-152))			

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DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 1-7, 14, 17, 20, and 21 in Paper No. 9 is acknowledged. The traversal is on the ground(s) that all of the groups should belong in a single class 348, subclass 699. This is not found persuasive because although Group I may belong in class 348, subclass 699, the majority of other claims belong in class 375, as the application is currently classified by the USPTO.

The requirement is still deemed proper and is therefore made FINAL.

- 2. Claims 8-13, 15, 16, 18, and 19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 9.
- 3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

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Specification

5. The abstract of the disclosure is objected to because last line, "Figs. 1 to 4" should be deleted. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 7. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 8. Claim 7 recites the limitation "said noise reduced discrete global motion signals" in lines 6-7. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 10. Claims 1-7, 14, 17, 20, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Ratakonda (5,995,095).

Ratakonda, in Figures 1-5, 7, 9, and 10, discloses the same method of extracting key frames 44 from a video sequence 32, wherein the video sequence 32 comprises compressed video data MPEG having motion vectors as specified in claims 1-7, 14, 17, 20, and 21 of the present invention; the method comprising the steps of generating

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global motion signals 72 based on the motion vectors; generating dominant global direction clusters 74 based on the generated global motion signals 72; selecting key frames 76 using the generated dominant global direction clusters 74; and decompressing the selected key frames 142 to obtain the extracted key frames 44.

With respect to claims 2-7, 20, and 21, Ratakonda also discloses selecting potential key frames using a first set of predefined rules 84; removing redundant key frames from the selected potential key frames using a second set of predefined heuristic rules 86 resulting in the selected potential key frames; removing similar and/or repeated key frames from the set of selected key frames using a color histogram technique 134 resulting in the selected key frames; wherein generating global motion signals comprise generating a pan global motion signal, a zoom global motion signal, and a tilt global motion signal 46; one or more of a pan left, pan right, tilt up, tilt down, zoom in, zoom out and global still motion cluster 46; generating discrete global signals DCT from the generated global motion signals; removing noise 86 from the generated discrete global motion signals; generating dominant global direction clusters 48 based on the noise reduced discrete global motion signals; wherein the motion vectors are block motion vectors (Fig. 9), and the first generating step comprises the steps of decompressing the compressed video data 142 to obtain the block motion vectors; converting the block motion vectors to forward block motion vectors (I, P, B, motion compensation); generating global motion signals μ based on the forward block motion vectors; and wherein the compressed video data is MPEG compressed video data 144.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. Lee whose telephone number is (703) 308-7584. The examiner can normally be reached on (703) 308-7584.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Y. Lee

Primary Examiner Art Unit 2613

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